APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/724,231	11/28/2000	Krishna Balachandran	LUC-280/Balachandran 15-4	6529

			EXAMINER
32205	7590	10/07/2004	CHANG, EDITH M

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ART UNIT	PAPER NUMBER
2637	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Supplemental Advisory Action	Application No. 09/724,231	Applicant(s) BALACHANDRAN ET AL.
	Examiner Edith M Chang	Art Unit 2637	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 28 June 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may <u>only</u> be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

<u>PERIOD FOR REPLY</u> [check either a) or b)]

a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.

b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.

2. ☒ The proposed amendment(s) will not be entered because:

    (a) ☒ they raise new issues that would require further consideration and/or search (see NOTE below);

    (b) ☐ they raise the issue of new matter (see Note below);

    (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or

    (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.
        NOTE: _____.

3. ☐ Applicant's reply has overcome the following rejection(s): _____.

4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

5. ☒ The a)☐ affidavit, b)☐ exhibit, or c)☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: *See attachmentt*.

6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.

7. ☒ For purposes of Appeal, the proposed amendment(s) a)☒ will not be entered or b)☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

    The status of the claim(s) is (or will be) as follows:

    Claim(s) allowed: _____.

    Claim(s) objected to: _____.

    Claim(s) rejected: *1-7,9-11,13-21 and 23-26*.

    Claim(s) withdrawn from consideration: _____.

8. ☐ The drawing correction filed on _____ is a)☐ approved or b)☐ disapproved by the Examiner.

9. ☐ Note the attached Information Disclosure Statement(s)(PTO-1449) Paper No(s). _____.

10. ☐ Other: _____.

In amended claim 1, the term "mean symbol error probability or mean bit error probability" raises new issues that would requiere further consideration and/or search.
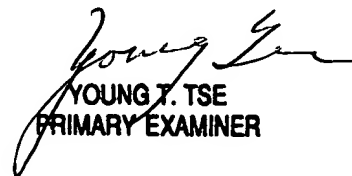
Applicant argues the references do not teach the limitation of claims 24 and 26: implementing different communication protocols for the communication channel upon the bit or symbol error exceeding the different predetermined thresholds.

Ngoc et al. discloses implementing different modulation schemes based on the bit error rates exceed different thresholds (column 2 line 65-column 3 line 35). The modulation schemes are the protocols for the communication channel. Therefore, Ngoc et al. discloses the limitation implementing a first communication protocol upon the error probability exceeding a first threshold and a second communication protocol upon the error exceeding a second threshold as recited in the claims.

Further Yao teaches the different types of protocols used in the communication channel based upon the BER, the bit error rate. In column 5, lines 40-57 of Yao provides: "The protocols contained within IS-707 and IS-99 to transmit data are different than the protocols used to transmit audio information as specified in IS-95, due to the properties associated with each data type. For example, the permissible error rate while transmitting audio information can be relatively high, due to the limitations of the human ear. A typical permissible frame error rate in an IS-95 compliant CDMA communication system is one percent, meaning that one percent of transmitted frames can be received in error without a perceptible loss in audio quality. In a data communication system, the error rate must be much lower than in a voice communication system, because a single data bit received in error can have a significant effect on the information being transmitted. A typical error rate in such a data communication system, specified as a Bit Error Rate (BER) is on the order of $10^{**}-9$, or one bit received in error for every billion bits received."

Hence Yao teaches different protocols (IS-707/IS-99 and IS-95) for the communication channel based upon the different error rate (1 percent and $10^{**}-9$) of the information (voice or data) and the error rate is the property associated with information transmitted over the communication channel, therefore, from the above providing Yao does suggest that a change be made in the transmission protocol based on the level of error rates.

As Ngoc et al. monitoring the bit error rate associated with radio frames communicated via the wireless link and implementing different modulation schemes upon the error rate exceeds different thresholds, it would have been obvious to a person of ordinary skill in the art to have Yao's protocol teaching in Ngoc et al.'s method for the purpose of increasing the probability of successful data transmission over wireless links. Hence, The combination is proper and the references suggests the limitation recited in the claims.

YOUNG T. TSE
PRIMARY EXAMINER